REMARKS

Claims 1 and 11 have been amended. Claims 14 and 19 have been cancelled without prejudice or disclaimer. Reconsideration and allowance of the present patent application based on the following remarks are respectfully requested. Accordingly, after entry of this Amendment, claims 1-7, 9 and 11-13, 15-18 and 20 will remain pending in the patent application.

Claims 1 and 11 were rejected under 35 U.S.C. §103(a) based on Cox *et al.* (U.S. Pat. No. 6,420,716) (hereinafter "Cox") in view of Shigeo (JP 6-302495). The rejection is respectfully traversed.

Applicant submits that the cited portions of Cox and Shigeo fail to disclose or render obvious a method of positioning an object at a required position on a first object table in a lithographic projection apparatus, comprising, *inter alia*, measuring a displacement between the first position of the object and a required position of the object on the first object table; removing the object from the first object table; translating the removed object, the first object table, or both, relative to each other by substantially the measured displacement, in a direction substantially parallel to the plane of the first object table; and placing the object at substantially the required position on the first object table, wherein a first surface of the object contacts the first object table, and wherein the required position corresponds to a position of the object at which a clamping force that clamps the object on the first object table is substantially homogenous on the first surface of the object.

First, Cox at col. 2, lines 45-54 states:

> a control mechanism responsive to the acceleration signal, for generating at least one control signal to control at least one of the positioning mechanisms so as to move the corresponding object table, thereby to compensate for movements of the projection system

and col. 4, lines 35-40 states:

> a first object table (mask table) MT provided with a mask holder for holding a mask MA (e.g. a reticle), and connected to a first positioning mechanism PM for accurately positioning the mask with respect to item PL

Thus, all that is disclosed in Cox is a control mechanism to move the object table with respect to the projection system PL. However, these aspects are not those that are recited in

claim 1. For example, claim 1 does not recite an "object place on a first position;" rather claim 1 recites "placing an object at a first position on the first object table." The "position" that is being referred to in the Office Action with respect to Cox is not a position on the first object table, as recited in claim 1, but a position with respect to the projection system. As another example, claim 1 does not recite "measuring a displacement;" rather claim 1 recites "measuring a displacement between the first position of the object and a required position of the object on the first object table." The "displacement" that is being referred to in the Office Action with respect to Cox is not a displacement between the first position of the object and a required position of the object on the first object table, as recited in claim 1, but a displacement of the object table with respect to the projection lens. In another example, claim 1 does not recite "placing the object at the required position"; rather claim 1 recites "placing the object at substantially the required position on the first object table." The "placing" that is being referred to in the Office Action with respect to Cox is not a "placing of the object at substantially the required position on the first object table," as recited in claim 1, but a positioning of the substrate table at a desired position with respect to the projection system.

Further, assuming *arguendo* that Cox and Shigeo are properly combinable (which Applicant does not concede), Applicant submits that the cited portions of Shigeo fail to overcome the deficiencies of Cox. The cited portions of Shigeo merely disclose removing the reticle 12 from the stage 11, rotating the stage 11, placing the reticle 12 back on the stage 11 and rotating the stage 11 in the reverse direction to return the reticle 12 to its original condition. (*See* Abstract and FIG. 8 of Shigeo).

The cited portions of Shigeo, therefore, do not disclose or teach a required position corresponding to a position of the object at which a clamping force that clamps the object on the first object table is substantially homogenous on the first surface of the object as recited in claim 1. There is no disclosure in the cited portions of a clamping force that clamps the object on the table, let alone a required position corresponding to a position of the object at which the clamping force is substantially homogenous on the first surface of the object.

The Office Action asserts "it is a design choice to have the marks wherever it is necessary in order to come up with a best alignment." Respectfully, the recited language does not relate to the location of alignment marks. Rather, it is about a certain position at which the object is placed on the object table, namely a position at which a clamping force that clamps the object on the first object table is substantially homogenous on the first surface of the object.

Further, "design choice" is not a proper ground for rejection under 35 U.S.C. §103. Design choices are discussed in the Manual of Patent Examining Procedure (MPEP) §2144.04(VI)(C), but only insofar that they constitute a rearrangement of parts. Applicant's claims cannot represent a "rearrangement of parts," because the cited references fail to disclose all of the parts disclosed in Applicant's claims, namely the cited portions of Cox and Shigeo fail to disclose or teach a clamping force that clamps the object on the table, let alone disclose or teach a required position corresponding to a position of the object at which the clamping force is substantially homogenous on the first surface of the object.

Further, the cited portions of Shigeo only teach "rotating" the stage 11 and does not, in any way, teach translating the removed object, the first object table, or both, relative to each other by substantially the measured displacement, in a direction substantially parallel to the plane of the object table, as recited in claim 1.

Claim 11 is patentable over the cited portions of Cox, Shigeo and any proper combination thereof at least for similar reasons as discussed above with respect to claim 1. For example, claim 11 is patentable over the cited portions of Cox, Shigeo and any combination thereof at least because this claim recites a method of positioning a substrate at a required position on a substrate table, said method comprising, *inter alia*, measuring a displacement between the first position of the substrate and a required position of the substrate on the substrate table; removing the substrate from the substrate table; translating the substrate, the substrate table, or both, relative to each other by substantially the displacement, in a direction substantially parallel to the plane of the substrate table; and placing the substrate at substantially the required position on the substrate table, wherein a first surface of the substrate contacts the substrate table, and wherein the required position corresponds to a position of the substrate at which a clamping force that clamps the substrate on the substrate table is substantially homogenous on the first surface of the substrate.

Accordingly, reconsideration and withdrawal of the rejection of claims 1 and 11 under 35 U.S.C. §103(a) based on Cox in view of Shigeo are respectfully requested.

Claims 2-7, 9-10 and 14-20 were rejected under 35 U.S.C. §103(a) based on Cox in view of Shigeo and U.S. Patent No. 4,778,275 to van den Brink et al. ("van den Brink"). The rejection is respectfully traversed.

Claims 10, 14 and 19 have been cancelled without prejudice or disclaimer and thus their rejection is now moot.

Claims 2-7, 9 and 15 are patentable over the cited portions of Cox, Shigeo and any proper combination thereof at least by virtue of their dependency from claim 1, and for the additional features recited therein. Similarly, claims 16-18 and 20 are patentable over the cited portions of Cox, Shigeo and any proper combination thereof at least by virtue of their dependency from claim 11, and for the additional features recited therein.

Furthermore, the cited portions of van den Brink fail to remedy the deficiencies of Cox and Shigeo. First of all, van den Brink is directed to aligning a mask MA with a substrate W – which is clearly different from positioning an object at a required position on a first object table, as required by claim 1. What van den Brink does disclose is that alignment system AS_1 determines the relative position of mask mark M_2 to substrate mark P_1 in which the mask MA (construed as corresponding to the claimed "object") remains on the mask table MT and the substrate W remains on the substrate table WT. (*See, e.g.*, col. 8, lines 6-9, lines 23-35 and FIG. 3 of van den Brink). Van den Brink further discloses that drive systems then move the mask MA and the substrate W relative to each other so that substrate mark P_1 coincides with mask mark M_2. (*See, e.g.*, col. 8, lines 58-63 of van den Brink). In other words, van den Brink merely provides moving the mask table MT with the mask MA relative to the substrate table WT with substrate W.

In so doing, van den Brink does not, in any way, disclose or teach translating the object, the first object table, or both, relative to each other by substantially the measured displacement, in a direction substantially parallel to the plane of the first object table, as required by claim 1. That is, nowhere does van den Brink remotely disclose or teach *translating the mask* MA ("object") *relative to the mask table* MT ("object table") - much less doing so, by substantially the measured displacement, in a direction substantially parallel to the plane of the first object table. van den Brink *only* discloses moving the mask table MT with the mask MA relative to the substrate table WT with substrate W.

Accordingly, any proper combination of the cited portions of Cox, Shigeo and van den Brink cannot result, in any way, in claims 2-7, 9, 15-18 and 20. Thus, the combination of the cited portions of Cox, Shigeo and van den Brink fail to present a *prima facie* case of obviousness. Accordingly, reconsideration and withdrawal of the rejection of claims 2-7, 9-10 and 14-20 under 35 U.S.C. §103(a) based on Cox in view of Shigeo and van den Brink are respectfully requested.

All matters having been addressed and in view of the foregoing, Applicant respectfully requests the entry of this Amendment, reconsideration of this application, and the immediate allowance of all pending claims.

Applicant's representative remains ready to assist the Examiner in any way to facilitate and expedite the prosecution of this matter. If any point remains in issue in which the Examiner feels may be best resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 03-3975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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